

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : Lobb et al.
Serial No. : 09/251,073
Filed : February 16, 1999
Title : TREATMENT FOR ASTHMA

Art Unit :
Examiner :

Assistant Commissioner for Patents
Washington, D.C. 20231

INFORMATION DISCLOSURE STATEMENT

Applicants submit the references listed on the attached form PTO-1449/

This application claims the benefit of priority under 35 USC §120 to U.S. application serial number 08/822,830, filed on March 21, 1997. The following references were submitted to and/or cited by the United States Patent and Trademark Office in the prior application and, therefore, are not provided in this application:

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Respectfully submitted,

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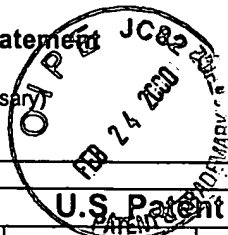
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Substitute Form PTO-1449 (Modified)	U.S. Department of Commerce Patent and Trademark Office	Attorney's Docket No. 10274-003003	Application No. 09/251,073
Information Disclosure Statement by Applicant (Use several sheets if necessary) (37 CFR §1.98(b))		Applicant Lobb et al.	
		Filing Date February 16, 1999	Group Art Unit



U.S. Patent Documents							
Examiner Initial	Desig. ID	Patent Number	Issue Date	Patentee	Class	Subclass	Filing Date If Appropriate
	AA	4,816,397	03/1989	Boss et al.			
	AB	4,833,092	05/1989	Geysen			
	AC	5,116,964	05/1992	Capon			
	AD	5,272,263	12/1993	Heshon			
	AE	5,730,978	03/1998	Wayner et al.			

Foreign Patent Documents or Published Foreign Patent Applications								
Examiner Initial	Desig. ID	Document Number	Publication Date	Country or Patent Office	Class	Subclass	Translation	
							Yes	No
	AF	0 330 506	08/1989	European Patent Office				
	AG	387701	09/1990	European Patent Office				
	AH	WO 92/00751	01/1992	WIPO				
	AI	WO 95/19790	01/1995	WIPO				

Other Documents (include Author, Title, Date, and Place of Publication)		
Examiner Initial	Desig. ID	Document
	AJ	McNeil JNCI 87: 1658-1660 (1995).
	AK	Issekutz et al., J. Immunol. 147: 109-116 (1991).
	AL	Issekutz, J. Immunol. 147: 4178-4184 (1991).
	AM	Mountain et al., Gen Eng. Rev 110:1, 10-13 only (1992).
	AN	Edgington, Biotechnology 10: 383-389 (1992).
	AO	Ward et al., Therapeutic Immunology 1: 165-171 (1984).
	AP	McCabe et al., Cell Immunol. 150: 364-375 (1993).
	AQ	Paul, Fundamental Immunol. 3rd Ed. 1993 Raven Press p. 242 only.
	AR	Osborn, Cell 62: 3-6 1990.
	AS	Gundel et al., J. Allergy Clin. Immunol. 85: 282 (1990).
	AT	Altman, L.K., (1991) "Human eosinophil adherence to vascular endothelium mediated by binding to vascular cell adhesion molecule 1 and endothelial leukocyte adhesion molecule 1", <i>Proceedings of the National Academy of Sciences</i> , vol. 88 pp. 7430-7433.

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EXAMINER: Initials citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.	

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	BA	Walsh, G.M., et al., (1991) "Human Eosinophil, But Not Neutrophil, Adherence to IL-1-Stimulated Human Umbilical Vascular Endothelial Cells Is $\alpha_4\beta_1$ (Very late Antigen-4) Dependent", <i>J. Immunol.</i> , vol 146, pp. 3419-3423.
	BB	Bochner, B.S., et al., (1991) "Adhesion of Human Basophils, Eosinophils, and Neutrophils to Interleukin 1-activated Human Vascular Endothelial Cells: Contributions of Endothelial Cell adhesion Molecules", <i>J. Exp. Med.</i> , vol. 173. pp. 1553-1556.
	BC	Dobrina, A., et al., (1991) "mechanisms of Eosinophil Adherence to Cultured Vascular Endothelial Cells", <i>J. Clin. Invest.</i> , vol. 88, pp. 20-26.
	BD	Pulido, R., et al., (1991), "Functional Evidence for Three Distinct and Independently Inhibitable Adhesion Activated Mediated by the Human Integrin VLA-4", <i>J. Biol. Chem.</i> , vol. 266, No. 16, pp. 10241-10245.
	BE	Gundel, R.H., et al., (1991), "Endothelial Leukocyte Adhesion Molecule-1 Mediates Antigen-induced Acute Airway Inflammation and Late-phase Airway Obstruction in Monkeys", <i>J. Clin. Invest.</i> , vol. 88, pp. 1407-1411.
	BF	Parmentier, S., et al., (1991), "Role of Glycoprotein Iia (beta subunit of very late activation antigens) in platelet functions", <i>Chemical Abstract</i> , vol. 115. No. 23, Abst. #252 791h.
	BG	Onish, R., et al., (1991), "A monoclonal antibody, 2H7, which defines a new very late activation antigen, inhibits IL-2-mediated cell proliferation", <i>Chemical Abstract</i> , vol. 114, No. 9, Abst. #79 730s.
	BH	Sears, M.R., (1990), "Epidemiology of Asthma", in <i>Asthma as an Inflammatory Disease</i> , P. O'Byrne Ed., Marcel Dekker, Inc.; New York, pp. 15-48.
	BI	Cockcroft, D.W., (1990), "Atopy and Asthma", in <i>Asthmas as an Inflammatory Disease</i> , P.O.'Byrne Ed., Marcel Dekker, Inc.; New York, pp. 103-125.
	BJ	Cuss, F.M.C., (1990), "The Pharmacology of Antiasthma Medications", in <i>Asthma as an Inflammatory Disease</i> , P. O'Byrne Ed., Marcel Dekker, Inc.; New York, pp. 199-250.
	BK	O'Byrne, P.M., (1990), "Airway inflammation and Asthma", in <i>Asthma as an Inflammatory Disease</i> , P. O'Byrne Ed., Marcel, Dekker, Inc.; New York, pp. 143-157.
	BL	Hogg, J.C., (1990), "Pathology of Asthma", in <i>Asthma as an Inflammatory Disease</i> , P. O'Byrne Ed., Marcel Dekker, Inc.; New York, pp. 1-13.
	BM	Chung, K.F., (1990), "Inflammatory Mediators in Asthma", in <i>Asthma as an Inflammatory Disease</i> , P. O'Byrne Ed., Marcel Dekker, Inc.; New York, pp. 159-183.
	BN	Elices, M.J., et al., (1990), "VCAM-1 on Activated Endothelium Interacts with the Leukocyte Integrin VLA-4 at a Site Distinct from the VLA-4/Fibronectin Binding site", <i>Cell</i> , vol. 60, pp. 577-584.
	BO	Devlin, J.J., et al., (1990), "Random Peptide Libraries: A Source of Specific protein Binding Molecules", <i>Science</i> , vol. 249, pp. 40-46.
	BP	Scott, J.K. and Smith, G.P., (1990), "Searching for Peptide Ligands with an Epitope Library", <i>Science</i> , vol. 249, pp. 386-390.
	BQ	Wegner, C.D., (1990), "Intercellular Adhesion Molecule-1 (ICAM-1) in the Pathogenesis of Asthma", <i>Science</i> , vol. 247, pp. 456-459.
	BR	Osborn, L., et al., (1989), "Direct cloning of vascular cell adhesion molecule 1, a cytokine-induced endothelial protein that binds to lymphocytes", <i>Cell</i> , vol. 59, pp. 1203-1211.

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Other Documents (include Author, Title, Date, and Place of Publication)

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	CA	Abraham, W.M., (1989), "Pharmacology of Allergen-Induced Early and late Airway Responses and Antigen-Induced Airway Hyperresponsiveness in Allergic Sheep", <i>Pulmonary Pharmacology</i> , vol. 2, pp. 33-40.
	CB	Ward, E.S., et al., (1989), "Binding Activities of a Repertoire of Single Immunoglobulin Variable Domains Secreted From <i>Escherichia coli</i> ", <i>Nature</i> , vol. 341, pp. 544-546.
	CC	Abraham, W.M., et al., (1988), "Cellular markers of Inflammation in the Airways of Allergic sheep with or without Allergen-induced Late Responses", <i>Am. Rev. Respir. Dis.</i> , vol. 138, pp. 1565-1571.
	CD	Hemler, M.E., et al., (1987), "Characterization of the Cell Surface Heterodimer VLA-4 and Related Peptides", <i>J. Biol. Chem.</i> , vol. 262, No. 24, pp. 11478-11485.
	CE	Bluestein, H.G. et al., (1987), "Immunopathogenesis of the neuropsychiatric manifestations of systematic lupus erythematosus", <i>Chemical Abstracts</i> , vol. 106, No. 5, Abst. #31 234r.
	CF	Sanchez-Madrid, F., et al., (1986), "VLA-3: A novel polypeptide association within the VLA molecular complex: cell distribution and biochemical characterization", <i>Eur. J. Immunol.</i> , vol. 16, pp. 1343-1349.
	CG	Jones, P.T., et al., (1986), "Replacing the Complementarity-Determining Regions in a Human Antibody with Those From a Mouse", <i>Nature</i> , vol. 321, pp. 522-525.
	CH	Kohler and Milstein, (1975), "Continuous Cultures of Fused Cells Secreting Antibody of predefined Specificity", <i>Nature</i> , vol. 256, pp. 495-497.
	CI	Sherman-Gold, (1993), "Companies Pursue Therapies Based on Complex Cell Adhesion molecules", <i>Genetic Engineering News</i> , Jul. 1993 issue, pp. 6-7, 14.
	CJ	Harris, W.J., and Emery, S., (1993), "Therapeutic antibodies-the coming of age", <i>TIBTECH Forum</i> , vol. 11, Feb. 1993, pp. 42-44.
	CK	Jutila, M.A. et al., (1988), "Homing Receptors in Lymphocyte, neutrophil, and Monocyte Interaction with Endothelial Cells", <i>First International Conference on Structure, Function and Regulation Molecules Involved in Leukocyte Adhesion</i> , Sep. 28-Oct. 2, 1988.
	CL	Holzmann, B., and Weissman, I.L., (1989) "Integrin Molecules Involved in Lymphocyte Homing to Peyer's patches", <i>Immunological Review</i> , no. 108, pp. 44-61.
	CM	Stoolman, L.M., (1989), "Adhesion Molecules Controlling Lymphocyte Migration", <i>Cell</i> , vol. 56, pp. 907-910.
	CN	Ostband, M.E. and Ross, S., (1990), "Problems in the investigational study and clinical use of cancer immunotherapy", <i>Immunology Today</i> , vol. 11, No. 6, pp. 193-195.
	CO	Gundel, et al., (1991), "Human Eosinophil Major Basic Protein Induces Airway Constriction and Airway Hyperresponsiveness in Primates", <i>J. Clin. Invest.</i> , vol. 87, pp. 1470-1473.
	CP	Hemler, et al., (1987), "The VLA Protein Family", <i>J. Biol. Chem.</i> , vol. 262, No. 7, pp. 3300-3309.
	CQ	Lerner, E.A., (1981), "How to Make a Hybridoma", <i>Yale J. Biol. Med.</i> , vol. 54, pp. 387-402.
	CR	Starr, C., (1991), "Treating Asthma: A Killer Gathers Strength", <i>Drug Topics</i> , (cover story), issue of Apr. 8, pp. 38-48.
	CS	Lobb, R. et al., (1991), "Expression and Functional Characterization of a Soluble Form of Vascular Cell Adhesion Molecule I", <i>Biochem. Biophys. Res. Commun.</i> , vol. 177(3), pp. 1498-1504.

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